

## CLAIMS

Please amend claims 1, 3, 5, 7, and 8 as follows:

1. (Currently amended) A processing system for performing addition and subtraction within limits upon a shared value comprising:

means for performing a first uninterruptible operation upon the shared value stored in an affected reservation location, the first uninterruptible operation using an operand;

means for comparing a resulting value of the first uninterruptible operation stored in the affected reservation location to limit values stored in limit locations;

means for performing a second uninterruptible operation to restore the affected reservation location if the resulting value of the first uninterruptible operation is not within the limit values in the limit locations;

means for reporting a failure if the resulting value of the first uninterruptible operation is not within the limit values in the limit locations;

means for performing a third uninterruptible operation to update an actual value location if the resulting value of the first uninterruptible operation is within the limit values in the limit locations;

means for performing a fourth uninterruptible operation to update an unaffected reservation location [register] if the resulting value of the first uninterruptible operation is within the limit values in the limit locations; and

means for reporting a success if the resulting value of the first uninterruptible operation is within the limit values in the limit locations.

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- 1 2. (Previously presented) The processing system of claim 1 wherein the first, second,
- 2 third, and fourth uninterruptible operations are LOCK XADD operations.

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1 3. (Currently amended) A processing system for performing addition and subtraction

2 within limits upon a shared value comprising:

3 means for receiving an operand;

4 means for performing a first uninterruptible operation upon the shared  
5 value stored in an affected reservation location, the first uninterruptible operation using  
6 the operand;

7 means for comparing a resulting value of the first uninterruptible operation  
8 stored in the affected reservation location to limit values stored in limit locations;

9 means for performing a second uninterruptible operation to restore the  
10 affected reservation location if the resulting value of the first uninterruptible operation is  
11 not within the limit values in the limit locations;

12 means for and reporting a failure if the resulting value of the first  
13 uninterruptible operation is not within the limit values in the limit locations;

14 means for performing a third uninterruptible operation to update an actual  
15 value location if the resulting value of the first uninterruptible operation is within the  
16 limit values in the limit locations;

17 means for performing a fourth uninterruptible operation to update an  
18 unaffected reservation location [register] if the resulting value of the first uninterruptible  
19 operation is within the limit values in the limit locations; and

20 means for reporting a success if the resulting value of the first  
21 uninterruptible operation is within the limit values in the limit locations.

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1 4. (Previously presented) The processing system of claim 3 wherein the first, second,  
2 third, and fourth uninterruptible operations are LOCK XADD operations.

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1 5. (Currently amended) A method for performing addition and subtraction within limits  
2 upon a shared value comprising the steps of:

3 first, performing a first uninterruptible operation upon the shared value  
4 stored in an affected reservation location, the first uninterruptible operation using an  
5 operand;

6 second, comparing a resulting value of the first uninterruptible operation  
7 stored in the affected reservation location to limit values stored in limit locations;

8 third, performing a second uninterruptible operation to restore the affected  
9 reservation location;

10 fourth, reporting a failure if the resulting value is not within the limit  
11 values in the limit locations;

12 fifth, performing a third uninterruptible operation to update an actual value  
13 location if the resulting value is within the limit values in the limit locations;

14 sixth, performing a fourth uninterruptible operation to update an  
15 unaffected reservation location [register] if the resulting value is within the limit values in  
16 the limit locations; and

17 seventh, reporting a success if the resulting value is within the limit values  
18 in the limit locations.

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1 6. (Previously presented) The method of claim 5 wherein the first, second, third, and  
2 fourth uninterruptible operations are LOCK XADD operations.

1 7. (Currently amended) A computer readable medium containing computer readable code  
2 comprising:

3 a code segment for performing a first uninterruptible operation upon the  
4 shared value stored in an affected reservation location, the first uninterruptible operation  
5 using an operand;

6 a code segment for comparing a resulting value of the first uninterruptible  
7 operation stored in the affected reservation location to limit values stored in limit  
8 locations;

9 a code segment for performing a second uninterruptible operation to  
10 restore the affected reservation location;

11 a code segment for reporting a failure if the resulting value is not within  
12 the limit values in the limit locations;

13 a code segment for performing a third uninterruptible operation to update  
14 an actual value location if the resulting value is within the limit values in the limit  
15 locations;

16 a code segment for performing a fourth uninterruptible operation to update  
17 an unaffected reservation location [register] if the resulting value is within the limit  
18 values in the limit locations; and

19 a code segment for reporting a success if the resulting value is within the  
20 limit values in the limit locations.

1 8. (Currently amended) A processing system for performing addition and  
2 subtraction within limits upon a shared value comprising:  
3 a processor, the processor  
4 performing a first uninterruptible operation upon the shared value  
5 stored in an affected reservation location, the first uninterruptible operation using an  
6 operand;  
7 comparing a resulting value of the first uninterruptible operation  
8 stored in the affected reservation location to limit values stored in limit locations;  
9 performing a second uninterruptible operation to restore the  
10 affected reservation location if the resulting value of the first uninterruptible operation is  
11 not within the limit values in the limit locations;  
12 reporting a failure if the resulting value of the first uninterruptible  
13 operation is not within the limit values in the limit locations;  
14 performing a third uninterruptible operation to update an actual  
15 value location if the resulting value of the first uninterruptible operation is within the  
16 limit values in the limit locations;  
17 performing a fourth uninterruptible operation to update an  
18 unaffected reservation location [register] if the resulting value of the first uninterruptible  
19 operation is within the limit values in the limit locations; and  
20 reporting a success if the resulting value of the first uninterruptible  
21 operation is within the limit values in the limit locations.